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  - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
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**31 March 2005**
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: **HEAT SENSITIVE RECORDING MATERIAL**

(57) Abstract: New colour developers, new mixture comprising it, its processes for preparation, heat sensitive recording compositions and materials comprising the novel developers and mixtures as well as their uses in heat sensitive recording materials.

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/050607

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07C69/76 B41M5/30 C07C69/88

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07C B41M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, PAJ, WPI Data, BEILSTEIN Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 395 680 B1 (HAYAKAWA KUNIO ET AL) 28 May 2002 (2002-05-28) column 1, lines 7-13; Table 1, compounds 53 and 54; Column 18, lines 74; preparation example 4 and example 4	1,6,8,9, 12
X	US 4 608 579 A (TANIGUCHI KEISHI) 26 August 1986 (1986-08-26) column 3, lines 7-column 8, line 30; column 12, compounds VI-13 and VI-17	1,6,8,9, 12
X	PATENT ABSTRACTS OF JAPAN vol. 010, no. 134 (M-479), 17 May 1986 (1986-05-17) -& JP 60 259494 A (RICOH KK), 21 December 1985 (1985-12-21) page 529, compounds 1,2,4,5,8-10 abstract	1,6,8,9, 12

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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\*&\* document member of the same patent family

Date of the actual completion of the international search

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# INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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# INTERNATIONAL SEARCH REPORT

International Application No  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	<p>&amp; PROCEEDINGS OF SPIE-THE INTERNATIONAL SOCIETY FOR OPTICAL ENGINEERING , 3799(ORGANIC PHOTOREFRACTIVES, PHOTORECEPTORS, WAVEGUIDES, AND FIBERS), 22-30 CODEN: PSISDG; ISSN: 0277-786X, 1999,</p>	
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# INTERNATIONAL SEARCH REPORT

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE CHEMABS 'Online!            CHEMICAL ABSTRACTS SERVICE, COLUMBUS,            OHIO, US;            WENKERT, ERNEST ET AL: "Derivatives of            hemimellitic acid. A synthesis of            erythrocentaurin"            XP002270045            retrieved from STN            Database accession no. 1964:461566            abstract            &amp; JOURNAL OF ORGANIC CHEMISTRY,            vol. 29, no. 9, 1964, pages 2534-2542,</p>	1
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# INTERNATIONAL SEARCH REPORT

International Application No  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	<p>DATABASE BEILSTEIN BEILSTEIN INSTITUTE FOR ORGANIC CHEMISTRY, FRANKFURT-MAIN, DE; XP002300434 Database accession no. BRN 7606148 abstract &amp; MOLONEY, M. ET AL.: TETRAHEDRON, ASYMMETRY, vol. 7, no. 9, 1996, pages 2551-2562,</p>	1
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP2004/050607

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; It is covered by claims Nos.:  
1-16 (part)

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-16(part)

Compounds of formula (1) according to claim 1 wherein A represents phenylene; mixtures, heat sensitive compositions, recording materials comprising them, processes for the manufacture of these compounds and their use for the manufacture of a heat sensitive recording material.

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2. claims: 1-16(part)

Compounds of formula (1) according to claim 1 wherein A represents biphenylene; mixtures, heat sensitive compositions, recording materials comprising them, processes for the manufacture of these compounds and their use for the manufacture of a heat sensitive recording material.

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3. claims: 1-16(part)

Compounds of formula (1) according to claim 1 wherein A represents naphthylene and anthrylene; mixtures, heat sensitive compositions, recording materials comprising them, processes for the manufacture of these compounds and their use for the manufacture of a heat sensitive recording material.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/050607

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